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EXAMINER	
CHOU, ANDREW Y	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/659,056	BLUMENTHAL ET AL.	
	Examiner	Art Unit	
	Andrew Y. Chou	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-20 and 24-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-20 and 24-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 6, 7, 10, 13, 17, 19, 20, 21, 22, and 25 have been amended. Claims 8 and 21-23 have been cancelled. Claims 1-7, 9-20, and 24-27 are pending.

Continued Examination under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFE 1.114. Applicant's submission filed on 06/19/2007 has been submitted.

Applicant's arguments are considered but are moot in view of new art, Tormey, made of record below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 9-20, and 24-27 are rejected under 35 U.S.C 102 (e) as being anticipated by Tormey et al. US 6,862,694 B1 (hereinafter Tormey).

Claim 1:

Tormey discloses a computer program product, tangibly embodied on a machine-readable storage device, comprising instructions operable to cause data processing apparatus to:

establish any number of checkpoints in a first computer program, the first computer program having a program structure, each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the first computer program (see for example page 4, lines 25-47, "address"); and

assign each checkpoint in the plurality of checkpoints to a checkpoint group without regard to the program structure of the first computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint (see for example page 4, lines 25-47. "table").

Claim 2:

Tormey further discloses the product of claim 1, wherein the checkpoints comprise assertion statements and breakpoint statements (see for example Abstract).

Claim 3:

Tormey further discloses the product of claim 1, further comprising instructions to: establish activation variants to enable multiple checkpoint groups to be managed jointly (see for example FIG. 4, item 16, "Coherency Controller", and

related text).

Claim 4:

Tormey further discloses the product of claim 1, further comprising instructions to: receive a control input activating a first checkpoint group; and activate the checkpoints in the first checkpoint group (see for example FIG. 4, item 16, "Coherency Controller", and related text).

Claim 5:

Tormey further discloses the product of claim 4, wherein the instructions to receive a control input further specifies a mode and the mode comprises instructions to:

receive a control input that specifies a mode in which checkpoints that are assertions terminate on assertion failure (see for example FIG. 3B, step 51, "Process Fails", and related text);

receive a control input that specifies a mode in which checkpoints that are assertions log status on assertion failure (see for example FIG. 3B, step 51, "Process Fails", and related text); and

receive a control input that specifies a mode in which checkpoints that are assertions break in a debugger on assertion failure (see for example FIG. 3B, step 51, "Process Fails", and related text).

Claim 6:

Tormey further discloses the product of claim 4, further comprise instructions to: receive a control input specifying that activating is to performed only for a particular user of multiple users using the first computer program (see for

example FIG. 2, step 21, and related text).

Claim 8:

(cancelled)

Claim 9:

Tormey further discloses the product of claim 8, wherein:

the checkpoints comprise assertion statements, each assertion statement when activated testing whether a specified assertion condition is true or false (see for example column 4, lines 35-49); and

the checkpoints comprise breakpoint statements, each breakpoint statement when activated halting program execution when it is encountered during program execution (see for example column 4, lines 35-49).

Claim 10:

Tormey further discloses the product of claim 8, wherein:

the assertion statements comprise an assertion statement having an argument to activate logging with programmer-controlled granularity, the argument being used to determine whether to update a log entry when the assertion statement fails (see for example FIG. 4, item 61, "Breakpoint Table", and related text).

Claim 11:

Tormey further discloses the product of claim 8, further comprising instructions to establish a development environment for developing the first computer program in which the checkpoint groups are development objects (see for example FIG. 4, item 11, and related text).

Claim 12:

Tormey further discloses the product of claim 1, wherein the checkpoints and the first computer program are in a compiled form (see for example column 4, lines 9-35).

Claim 13:

Tormey discloses an apparatus (see for example FIG. 4, and related text), comprising:

means for establishing a plurality of checkpoints in a computer program, the computer program having a program structure, each checkpoint in the plurality of checkpoints being defined by a respective statement in source code of the computer program (see for example page 4, lines 25-47, "address); and

means for assigning each checkpoint in the plurality of checkpoints to a checkpoint group without regard to the program structure of the computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint (see for example page 4, lines 25-47. "table").

Claim 14:

Tormey further discloses the apparatus of claim 13, wherein: the checkpoints comprise assertions and breakpoints (see for example Abstract).

Claim 15:

Tormey further discloses the apparatus of claim 13, further comprising: means for associating an activation variant with a checkpoint group (see for example FIG. 4, item 16, "Coherency Controller", and related text).

Claim 16:

Tormey further discloses the apparatus of claim 13, further comprising: means for associating an activation variant with a compilation unit (see for example FIG. 4, item 16, "Coherency Controller", and related text).

Claim 17:

Tormey discloses a method, comprising:

receiving a computer program having a plurality of checkpoints, each checkpoint being assigned to at least one of a plurality of checkpoint (see for example FIG. 2, step 21, and related text), each checkpoint and checkpoint group being identified by a group (see for example FIG. 2, step 27, "mapping talbes", and related text), each checkpoint in the plurality of each checkpoints being defined by a respective statement in source code of the computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint, the statement including the group identifier identifying the checkpoint group (see for example page 4, lines 25-47, "address"); and

receiving user input to invoke checkpoints as a group according to their group identifiers (see for example FIG. 5, step 62, and related text).

Claim 18:

Tormey further discloses the method of claim 17, further comprising:
receiving a user input specifying a mode of invocation of checkpoints; and
invoking checkpoints according to the specified mode (see for example page 4, [0046]).

Claim 19:

Tormey further discloses the method of claim 17, further comprising:

receiving a further user input specifying a scope of invocation of checkpoints, the scope specifying that checkpoints are to be invoked only for a particular user of multiple users using the first computer program (see for example FIG. 2, step 21, and related text); and

invoking checkpoints according to the specified scope (see for example FIG. 2, step 21, and related text).

Claim 21:

(Cancelled)

Claim 22:

(Cancelled)

Claim 23:

(Cancelled)

Claim 24:

Tormey further discloses the method of claim 17, wherein the computer program has checkpoints including both assertions and breakpoints (see for example Abstract).

Claim 25:

Tormey discloses a method for adding checkpoints to a computer program having source code, the method comprising:

adding to the computer program a plurality of checkpoints each assigned to a checkpoint group by a respective group name for the checkpoint, each checkpoint in the plurality of checkpoints being defined by a respective statement

in source code of the computer program, the assignment of each checkpoint to a checkpoint group being specified in the statement defining the respective checkpoint (see for example page 4, lines 25-47, "address").

Claim 26:

Tormey further discloses the method of claim 25, further comprising:

adding the plurality of checkpoints to the source code of the computer program, the respective group name for each checkpoint being included in the source code for the checkpoint (see for example FIG. 2, step 27, "mapping talbes", and related text); and

transporting the checkpoint groups as development objects with the computer program from a development environment to a production environment, the development objects being objects created and managed by the development environment (see for example FIG. 4, item 18, "user interface", and related text).

Claim 27:

Tormey further discloses the product of claim 10, wherein:

the argument to activate logging indicates that a log entry is made for each distinct value of a named field (see for example FIG. 6B, step 81, "CC Tables", and related text).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

> be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tormey et al US 6,862,694 B1 (hereinafter Tormey) in view of Bates et al. US 2003/0217354 A1 (hereinafter Bates).

Claim 7:

Tormey fails to disclose discloses the product of claim 4, further comprise instructions to:

receive a control input specifying that activating is to be performed only for a particular server of multiple servers on which the first computer program is running. However, Bates in the same analogous art of debugging computer programs discloses instructions to:

receive a control input specifying that activating is to be performed only for a particular server of multiple servers on which the first computer program is running (see for example page 2, [0032], and Fig. 2, and related text). Therefore, it would have been obvious to a person of ordinary skill in the art to modify system disclosed in Tormey to include servers as taught in Bates for debugging a computer program in a network environment (see for example Bates page 3, [0034]).

Claim 20:

See Claim 7 above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Chou whose telephone number is (571) 272-6829. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed tot eh TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

AYC

TUAN DAM
SUPERVISORY PATENT EXAMINER